

**ELECTROSTATIC INDUCTION TRANSISTOR AND  
MANUFACTURE THEREOF**

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Patent Number: JP4328874  
Publication date: 1992-11-17  
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Requested Patent: ☐ JP4328874  
Application Number: JP19910124862 19910427  
Priority Number(s):  
IPC Classification: H01L29/804; H01L21/20; H01L29/04  
EC Classification:  
EC Classification:  
Equivalents:

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**Abstract**

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**PURPOSE:** To obtain a grid and a channel section possessed of a hetero-junction interface excellent in Schottky junction characteristics.

**CONSTITUTION:** A substrate 1 has such a stepped and sloping surface that flat terraces 1a and steps 1b whose risers are vertical to the terraces 1a are provided extending from one side to the other side, and an N-type GaAs semiconductor layer 2 is provided onto the surface of the substrate 1 to form terraces 2a and steps 2b uniform in shape, a vertical superlattice layer which constitutes a grid section 3 and a vertical superlattice layer which forms a channel section 4 are formed on each of the terraces 2a through an atomic layer epitaxy method taking advantage of the steps 2b so as to come into contact with each other, and an I-type GaAs semiconductor layer 5 is laminated thereon.